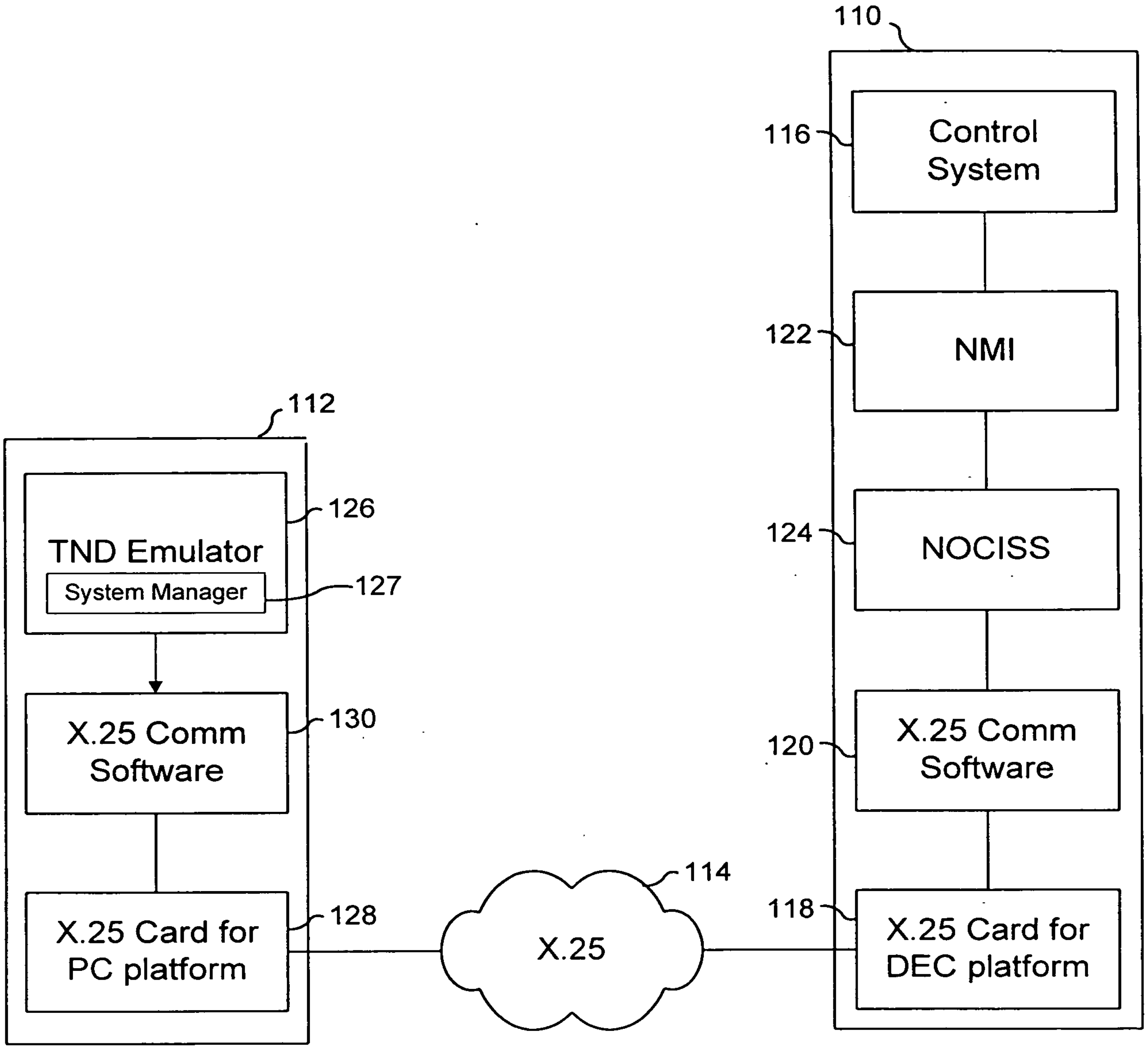

110
116
Control System
122
NMI
124
NOCISS
120
X.25 Comm Software
118
X.25 Card for DEC platform
114
X.25
112
126
TND Emulator
System Manager
127
130
X.25 Comm Software
128
X.25 Card for PC platform

FIG. 1

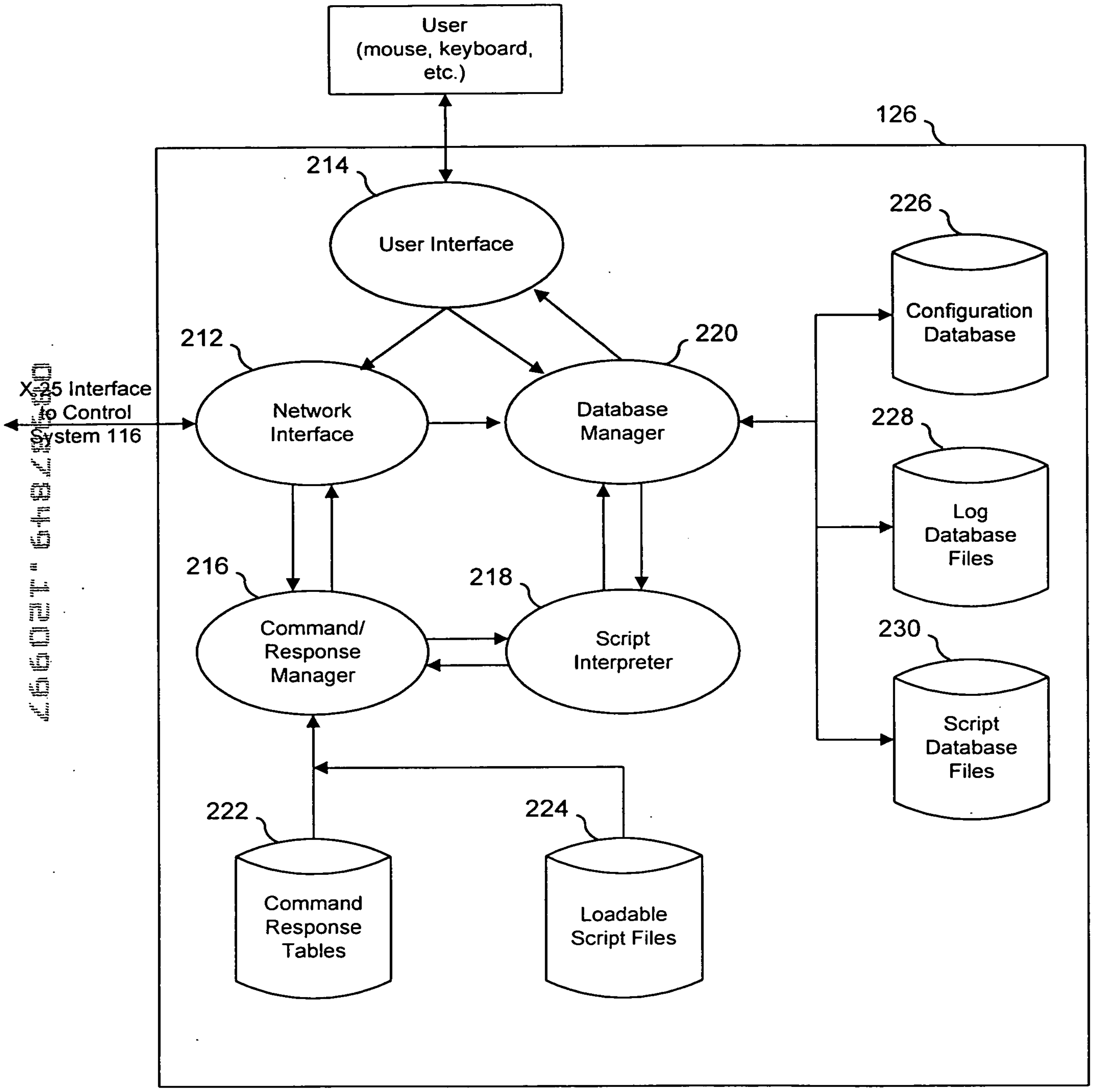
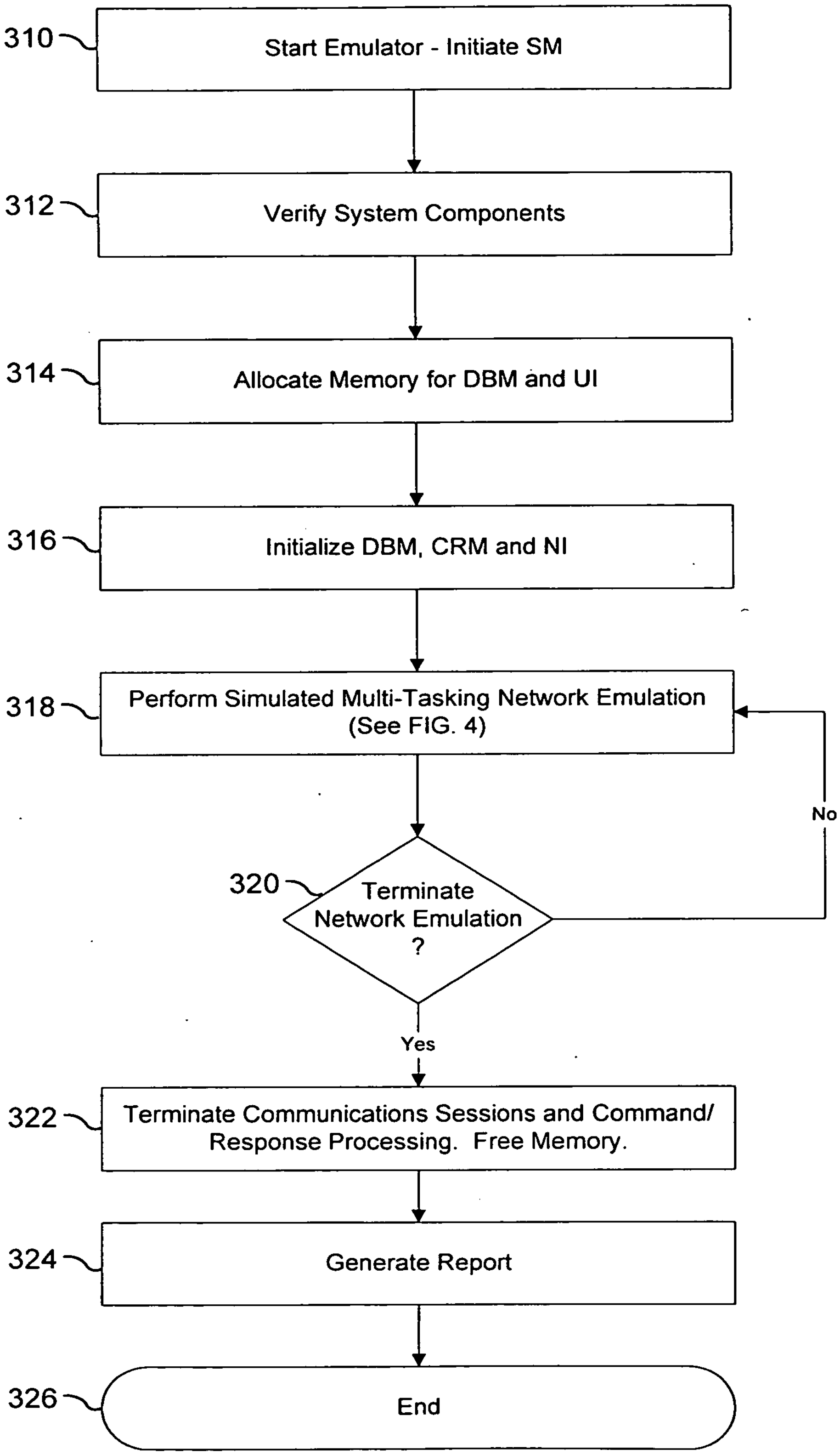

User
(mouse, keyboard,
etc.)
126
214
User Interface
226
Configuration
Database
212
220
X-25 Interface
to Control
System 116
Network
Interface
Database
Manager
228
Log
Database
Files
216
218
Command/
Response
Manager
Script
Interpreter
230
Script
Database
Files
222
224
Command
Response
Tables
Loadable
Script Files

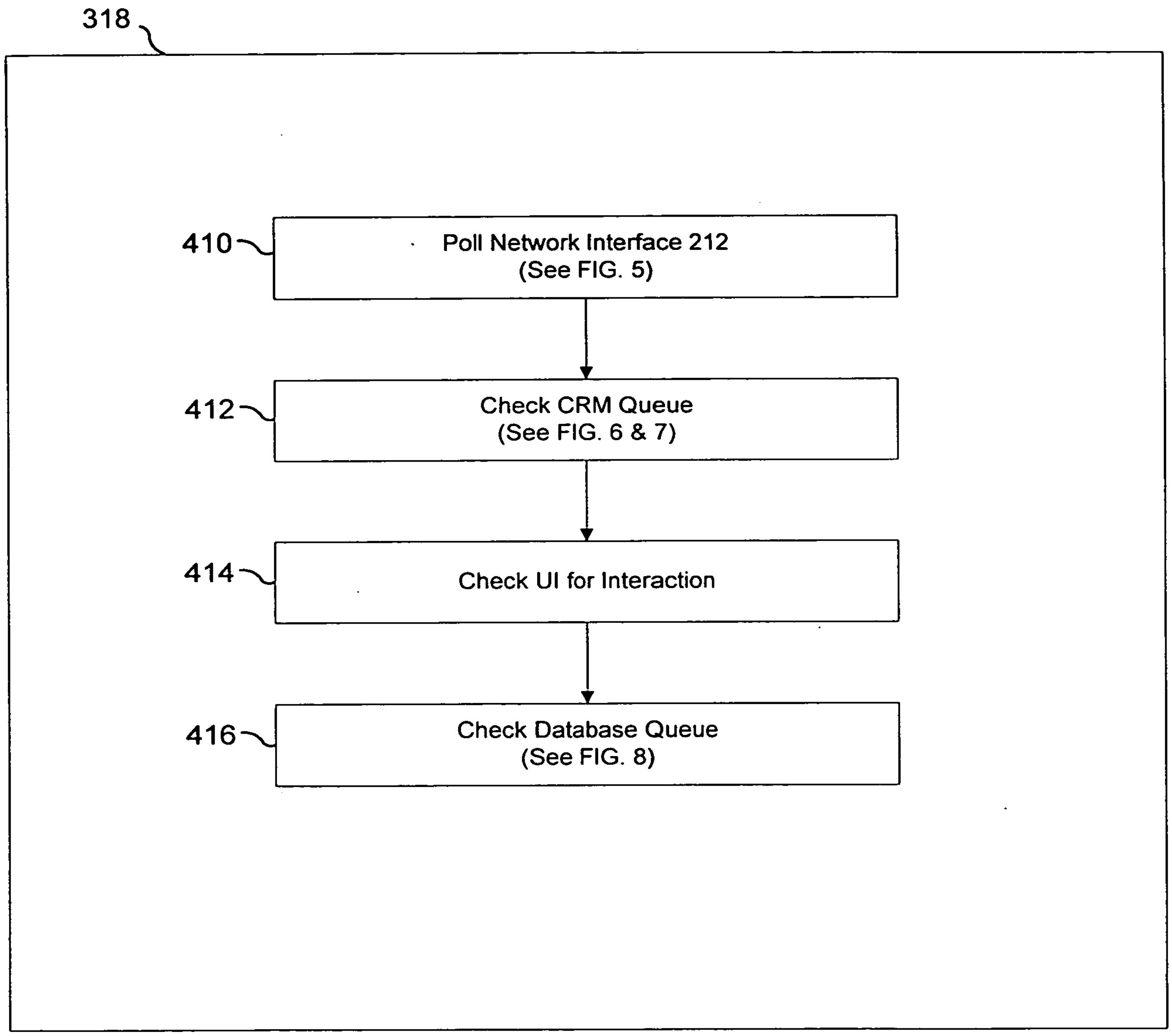
FIG. 2



System Manager

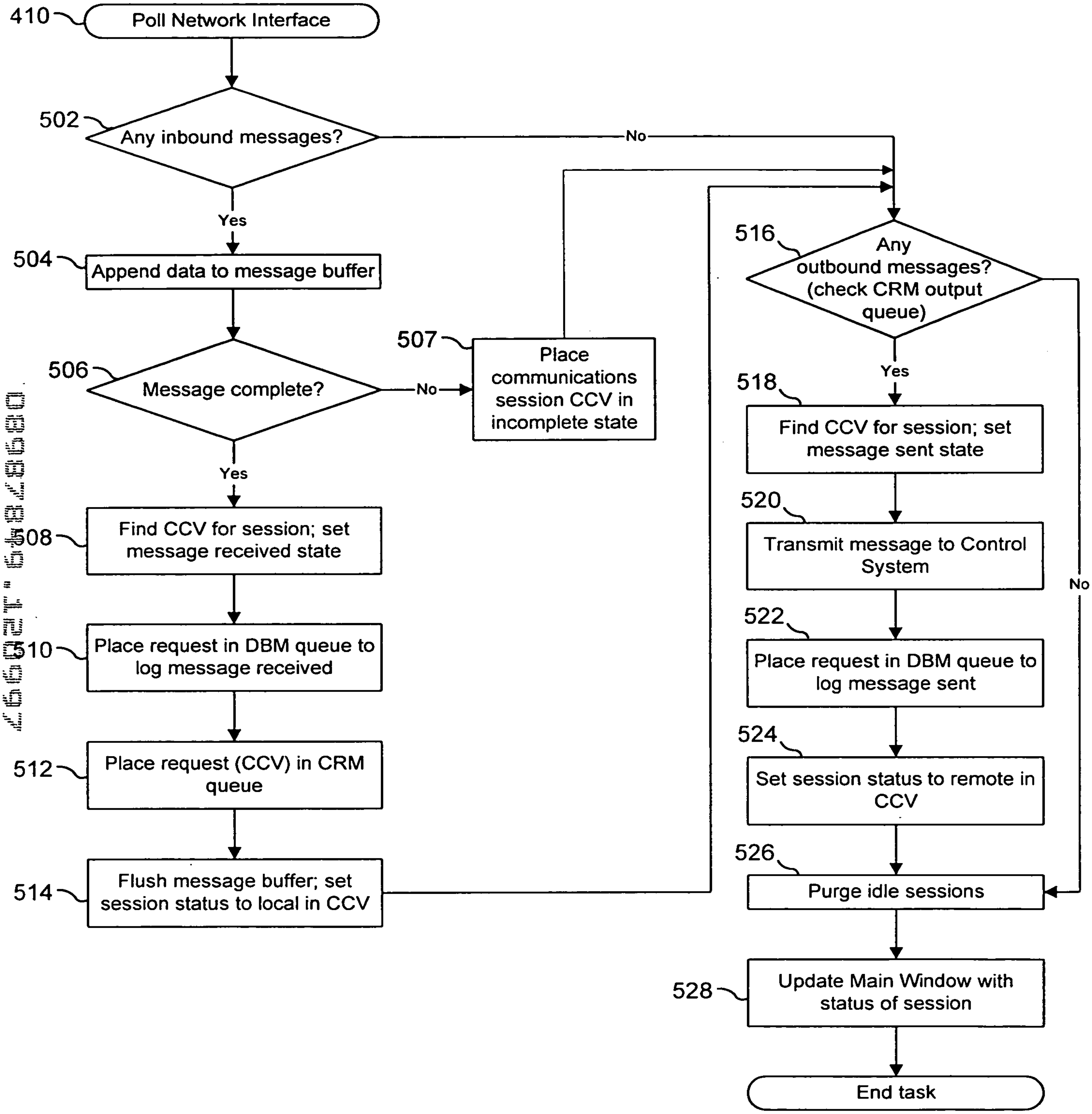
FIG. 3

08987849 .120997



Simulated Multitasking

FIG. 4



Polling Network Interface

FIG. 5

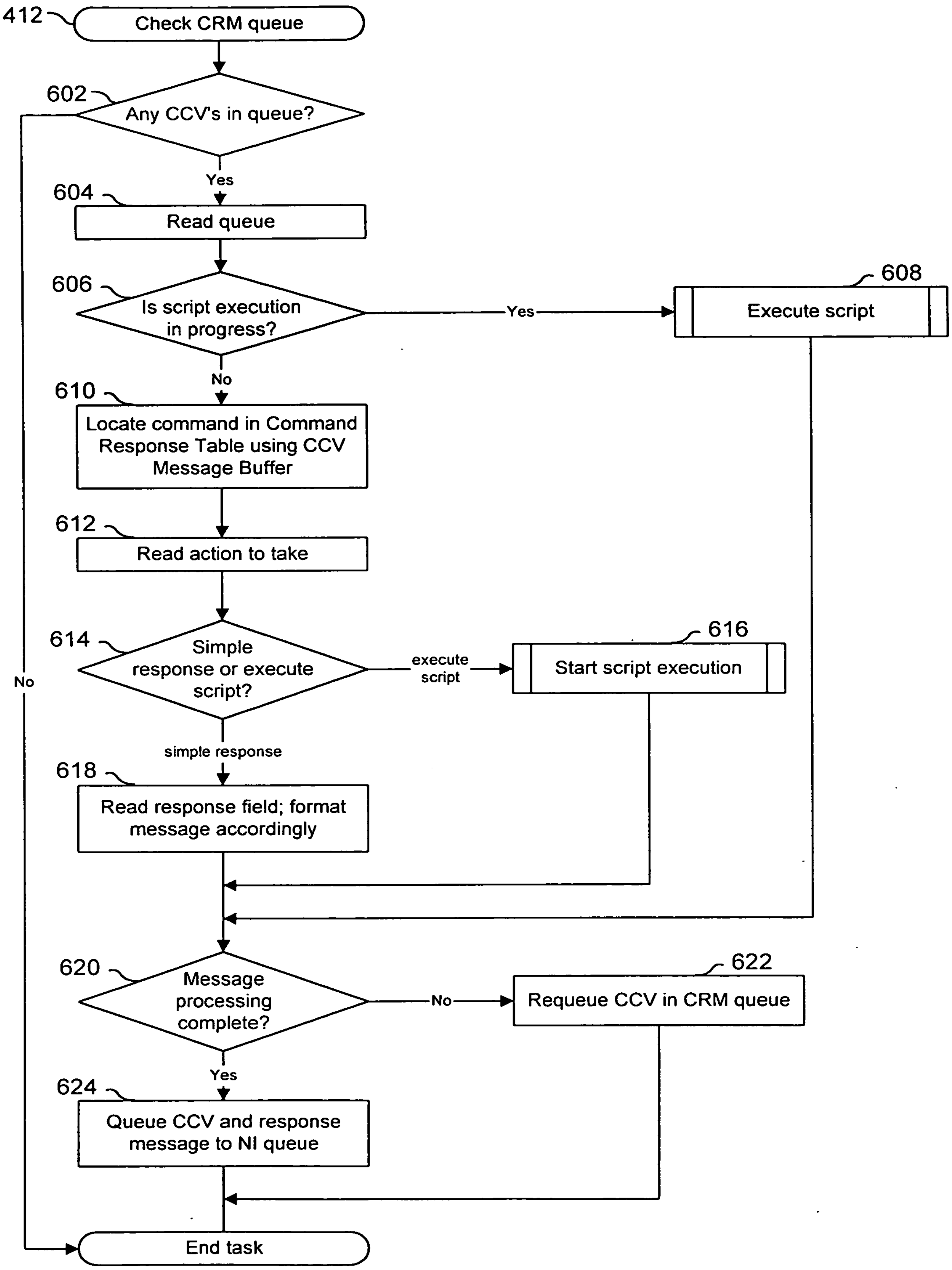

412
Check CRM queue
602
Any CCV's in queue?
No
Yes
604
Read queue
606
Is script execution in progress?
Yes
608
Execute script
No
610
Locate command in Command Response Table using CCV Message Buffer
612
Read action to take
614
Simple response or execute script?
execute script
616
Start script execution
simple response
618
Read response field; format message accordingly
620
Message processing complete?
No
622
Requeue CCV in CRM queue
Yes
624
Queue CCV and response message to NI queue
End task

FIG. 6

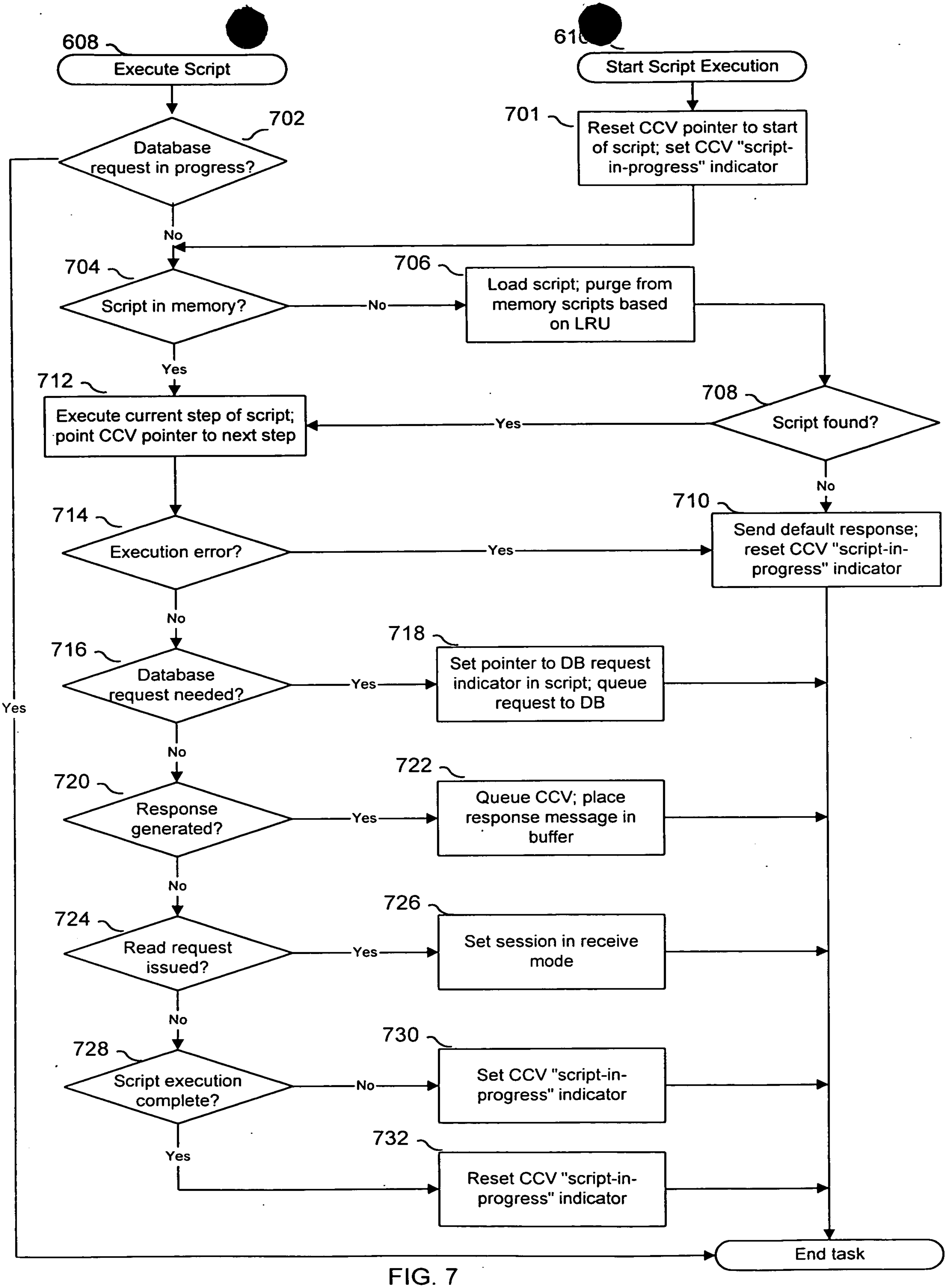
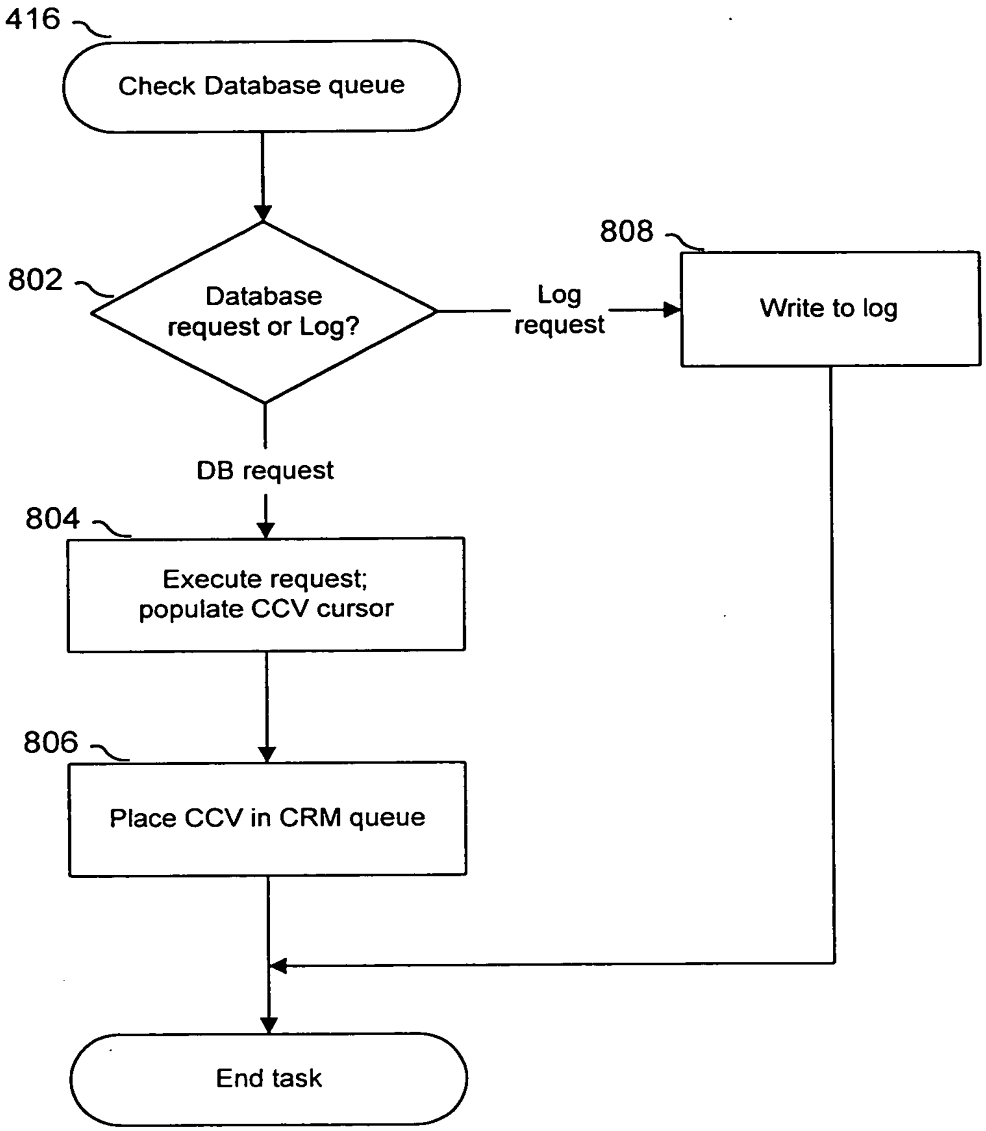
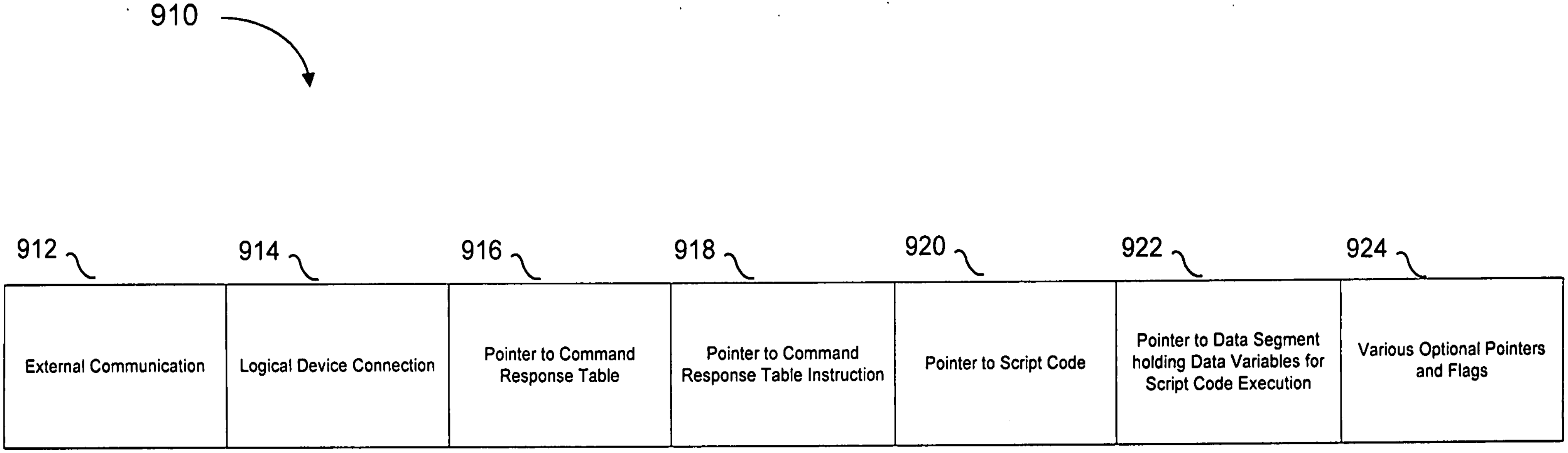

608
Execute Script
61
Start Script Execution
702
Database request in progress?
701
Reset CCV pointer to start of script; set CCV "script-in-progress" indicator
No
704
Script in memory?
No
706
Load script; purge from memory scripts based on LRU
Yes
712
Execute current step of script; point CCV pointer to next step
708
Script found?
Yes
No
714
Execution error?
Yes
710
Send default response; reset CCV "script-in-progress" indicator
No
716
Database request needed?
Yes
718
Set pointer to DB request indicator in script; queue request to DB
Yes
No
720
Response generated?
Yes
722
Queue CCV; place response message in buffer
No
724
Read request issued?
Yes
726
Set session in receive mode
No
728
Script execution complete?
No
730
Set CCV "script-in-progress" indicator
Yes
732
Reset CCV "script-in-progress" indicator
End task

FIG. 7



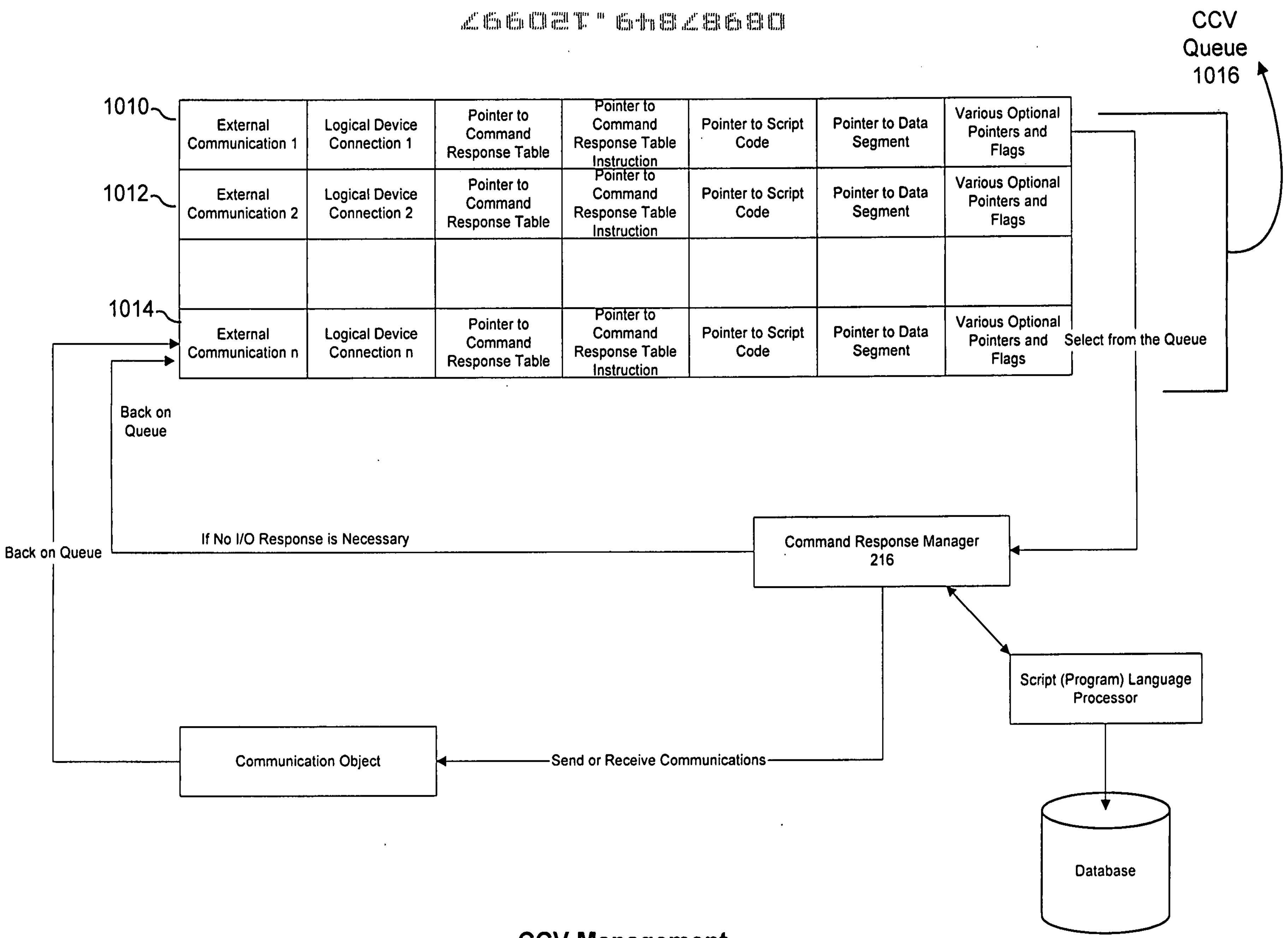
CHECKING DATABASE QUEUE

FIG. 8



Command Control Vector

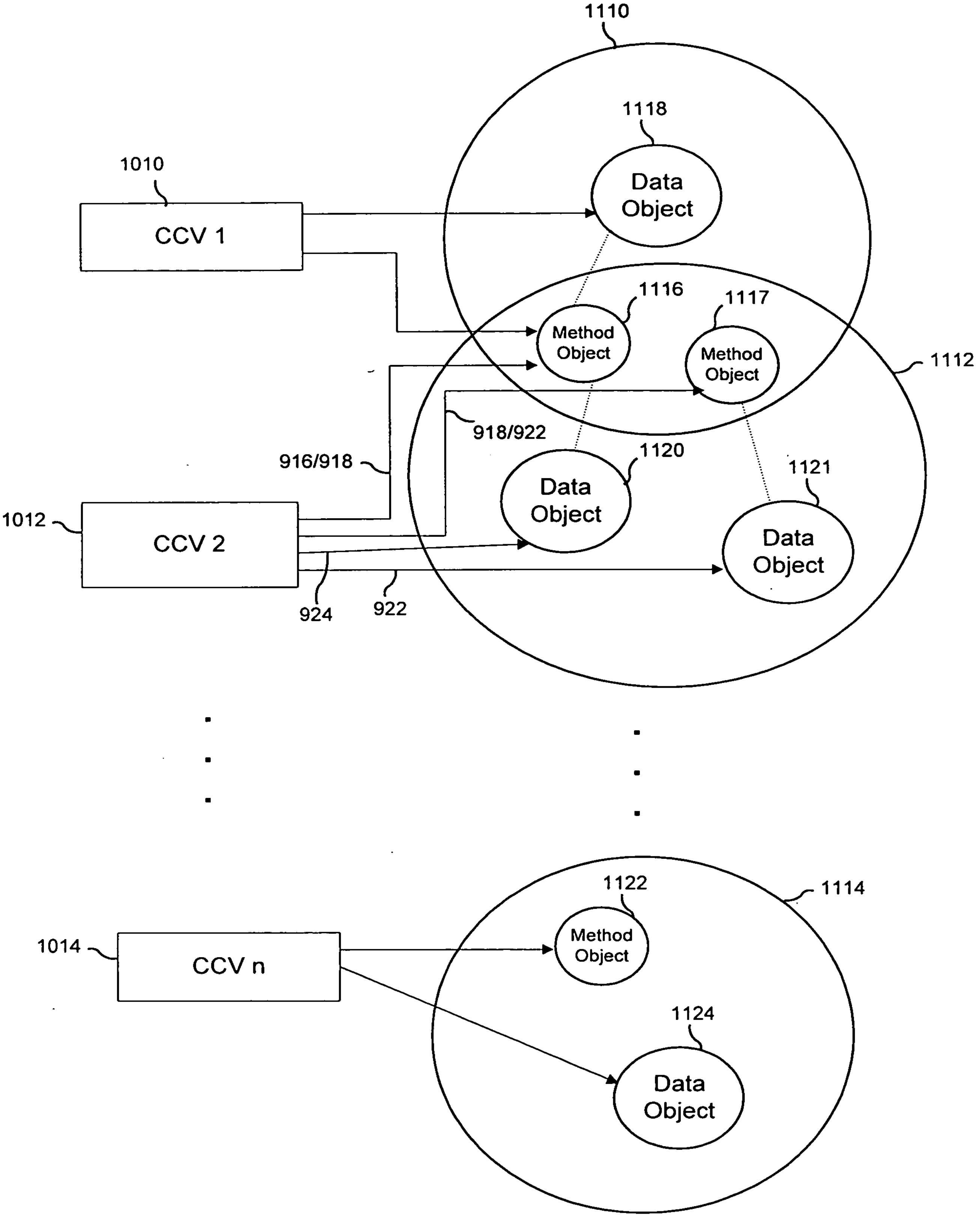
FIG. 9



1010	External Communication 1	Logical Device Connection 1	Pointer to Command Response Table	Pointer to Command Response Table Instruction	Pointer to Script Code	Pointer to Data Segment	Various Optional Pointers and Flags
1012	External Communication 2	Logical Device Connection 2	Pointer to Command Response Table	Pointer to Command Response Table Instruction	Pointer to Script Code	Pointer to Data Segment	Various Optional Pointers and Flags
1014	External Communication n	Logical Device Connection n	Pointer to Command Response Table	Pointer to Command Response Table Instruction	Pointer to Script Code	Pointer to Data Segment	Various Optional Pointers and Flags

CCV Management

FIG. 10



Virtual Objects

FIG. 11

DevID	DevType
1	DMS250
2	DEX
3	CTS
4	SCX
5	AXE
6	DEX600E
8	STP
9	DAO
A	DXC
B	ESF
C	AP
D	CAC
E	DIM
F	LSE
G	MRS
H	SITECN
J	APC
K	(unk)
N	GATEWY
P	PRESID
S	NAOM
T	DAOM

Table 2

Field Name	Type	Index	Description
DevID	A1	Y	Valid Device ID
DevType	A8	N	Valid Device Types

Table 1

Field Name	Type	Index	Description
FinID	A5	Y	Finance ID
DevType	A8	Y	Generic Name of Table
DOSName	A8	N	Unique DOS File Name

Table 5

Field Name	Type	Index	Description
Time	N	N	Time of event in HHMMSSSS format
Task	N	N	Task No. corresponding to Virtual Circuit Posting Log Message
Message	A80	N	Message posted

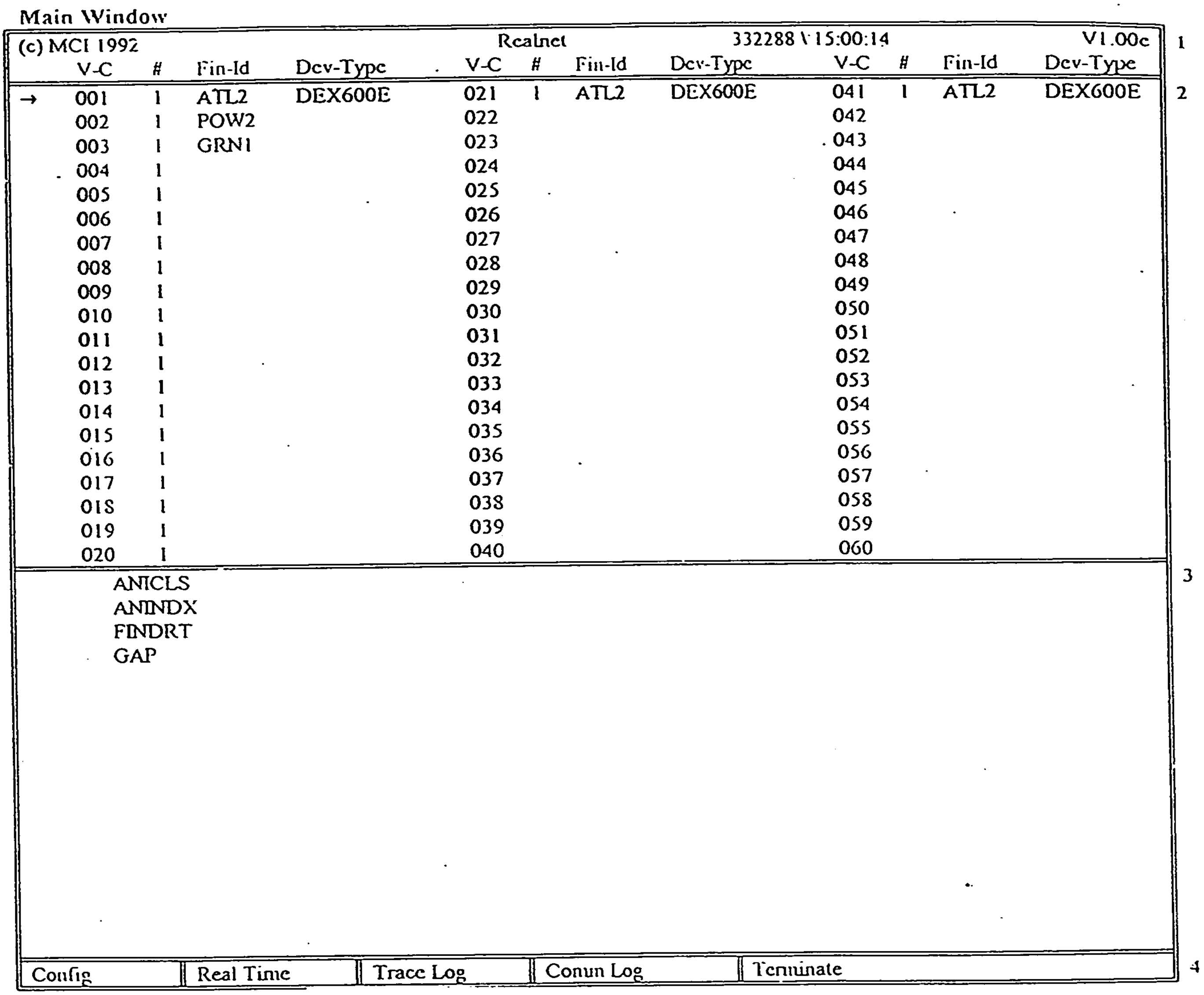
Table 3: Trace Log

Field Name	Type	Index	Description
Time	N	N	Time of event in HHMMSSSS format
FinID	A8	N	Finance ID of Session Logging Message
SessNo	A8	N	Session No. corresponding to the Virtual Circuit Posting Log Message
Message	A80	N	Message posted

Table 4: Communications Log

Database Tables for Configuration Database 226

FIG. 12



(c) MCI 1992 Realnet 332288 \ 15:00:14 V1.00c

	V-C	#	Fin-Id	Dev-Type	V-C	#	Fin-Id	Dev-Type	V-C	#	Fin-Id	Dev-Type
→	001	1	ATL2	DEX600E	021	1	ATL2	DEX600E	041	1	ATL2	DEX600E
	002	1	POW2		022				042			
	003	1	GRN1		023				043			
	004	1			024				044			
	005	1			025				045			
	006	1			026				046			
	007	1			027				047			
	008	1			028				048			
	009	1			029				049			
	010	1			030				050			
	011	1			031				051			
	012	1			032				052			
	013	1			033				053			
	014	1			034				054			
	015	1			035				055			
	016	1			036				056			
	017	1			037				057			
	018	1			038				058			
	019	1			039				059			
	020	1			040				060			

ANICLS
ANINDX
FINDRT
GAP

FIG. 13

MCI Confidential

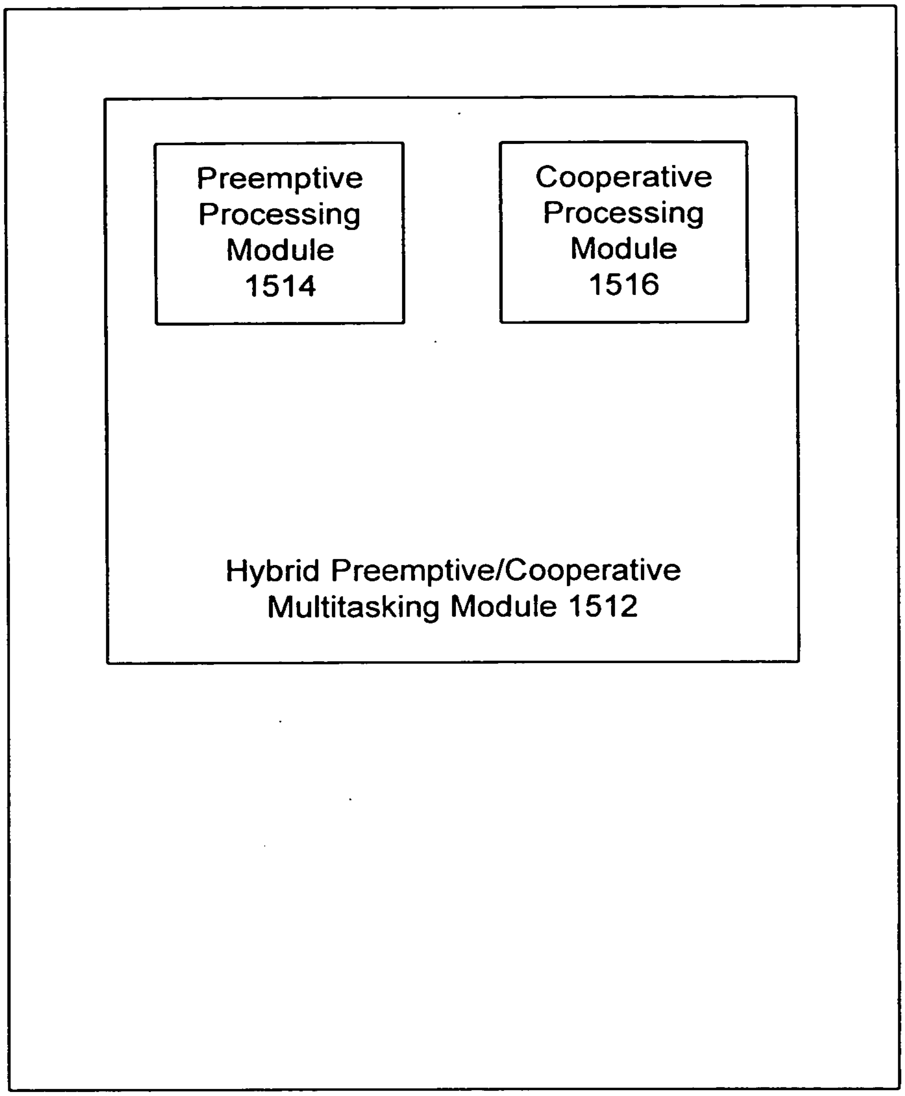
1410

The Command Response Manager uses a Command Response Table to generate responses to messages.

	Column	Size	Description
1412	Entry	integer	Unique Identifying Number
1414	Command	Varying 0-256 characters	Selection Criteria
1416	Response	Varying 0-256 characters	Response Text String
1418	Next Response	integer	pointer to next response entry
1420	Next Command	integer	pointer to next command entry
1422	Next Condition	integer	pointer to next condition entry
1424	Repeat	integer	repeat this message n times
1426	Delay	integer	delay message n seconds

Command Response Table Format

FIG. 14



SYSTEM MANAGER 127

FIG. 15

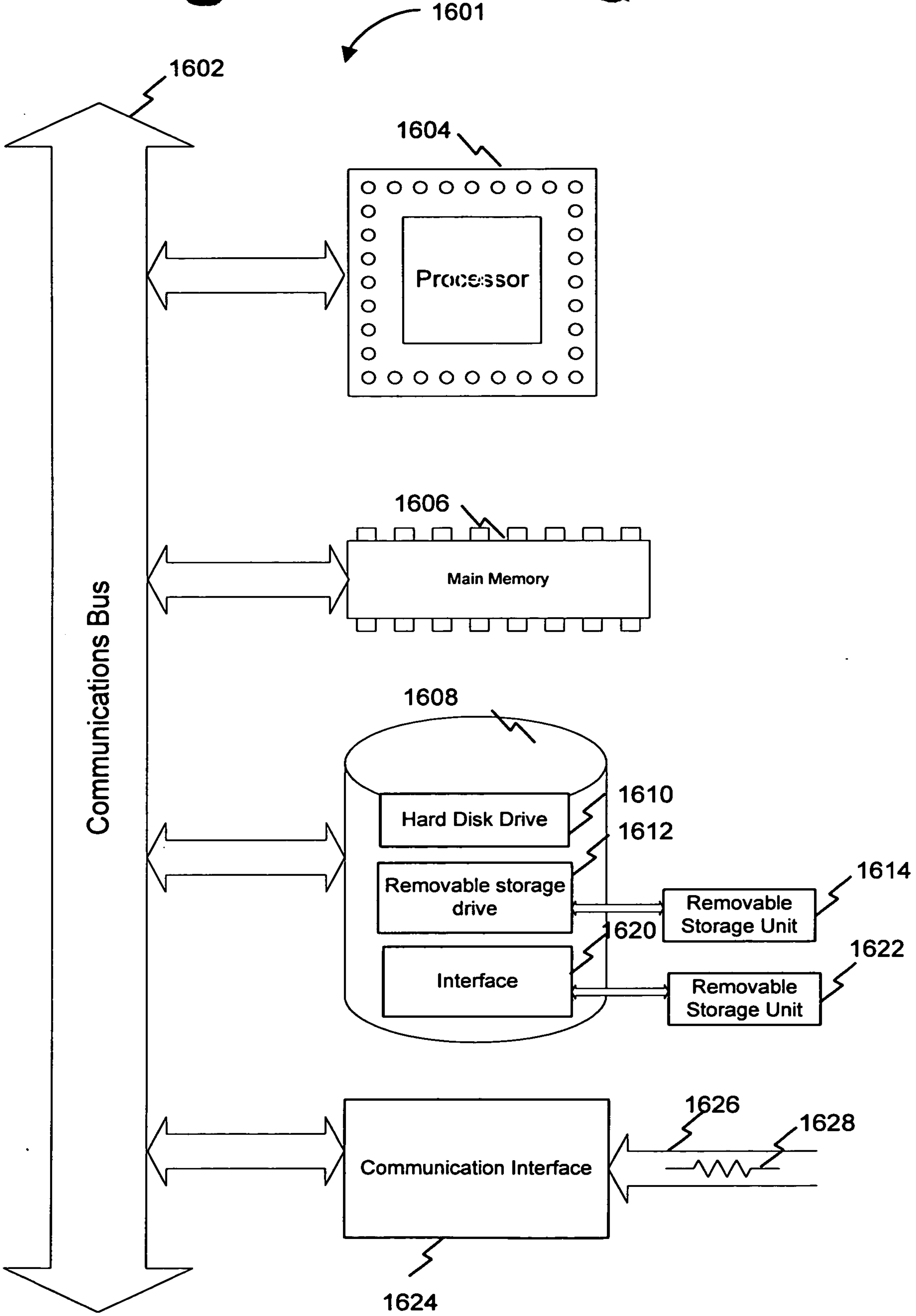

1601
1602
1604
Processor
1606
Main Memory
1608
Hard Disk Drive
1610
1612
Removable storage drive
1614
Removable Storage Unit
1620
Interface
1622
Removable Storage Unit
Communications Bus
1626
1628
Communication Interface
1624

FIG. 16